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Who Owns the Largest Firms Around the World?

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Abstract

In this research-paper we evaluate how corporate control around the world is defined and which variables, related to a firm's characteristics and the countries' infrastructures, influences this. We find that there is a small number of countries where firms are widely held. The role of financial institutions seems to be different in civil and common law-based countries. While they seem to act as a monitor of management in common law-based countries, in civil law countries they act as a monitor of large shareholders. Finally, we find that firm's size is the most important determinant of ultimate owners.

1. Introduction

Corporate ownership around the world is a present-day debate in finance. Concurrently, there is a connection between corporate control, corporate governance, and agency costs. Whereas there is a conflict of interests between shareholders and management in widely held firms (see Berle and Means (1932) and Jensen and Meckling (1976)), there is another type of agency cost, with different players, when the expropriation of wealth occurs between minority shareholders and a larger block shareholder that simultaneously controls management and tries to expropriate wealth from minority shareholders. When that is the case, the private benefits of large shareholders are higher than the costs of monitoring the management, and this is the reason why management and large shareholders have the same interests. Bebchuk (1999) develops a theory whereby the founders of public companies maintain a lock on control, because their private benefits are valuable enough to be captured by rivals. On the other hand, when corporate ownership is diffused, private benefits are not significant enough and the free rider problem concerning management monitoring will subsist (Shleifer and Vishny (1986).

Recently, the discussion regarding the main forces that influence corporate ownership has been focused either on law and finance or on political economy. The influence of the legal system on shareholder rights standards is well documented (La Porta *et al* (1998) and Stulz and Williamsom (2003), for example). Common law-based countries, such as the US, offer higher shareholder protection, and consequently a larger blockholder is less necessary because the smaller ones are well protected. In fact, under those conditions, insiders have fewer opportunities to expropriate wealth from outsiders (La Porta *et al* (2000)). Corporate ownership is not only influenced by law, but also by political economy. Roe (2000), for example, defend this point of view. Furthermore, ignoring the importance of political economy can sometimes produce biased conclusions. For example, following the Great Depression and the consequent collapse of Italian investment banks, plus the dawn of the

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Fascist regime, the influence of the government on industrial companies increased, and consequently an undeveloped capital market emerged, with low investor protection. This explains why in the post-war period the Italian companies were family-owned. A similar event occurred in Portugal. After the Revolution of 1974, banks and industrial firms were nationalised, the stock exchange closed, and many investors lost their investments. When the companies were privatised at the end of the 80's some were returned to the old owners whereas others remained in the hands of the government, even after they went public. Is it possible not to consider the consulate of Margaret Thatcher as regards to capital market development - namely through her privatisation decisions, creating the popular capitalism -, and consequently its importance in terms of the changes in corporate ownership of UK firms?

The perennial work of Berle and Means (1932), "The Modern Corporation and Private Property", characterised the corporate ownership of the US firms as widely held by small shareholders, although the management has the control of the firm. This can be explained not only by the high standards of investor protection offered by the US legal system, but also by the low intervention of the government in private business. Nevertheless, according to several theorists, this result can not be extended to the rest of the world. According to Faccio and Lang (2002), based on a sample of Western European firms, show that ownership is not homogeneous. Their results reveal a large number of widely held firms in the UK and Ireland, in comparison to continental Europe. They also show that the smallest firms and the industrial firms are more family-owned than financial institutions, and in some countries the state plays a decisive role in the biggest firms. Claessens *et al* (2000), using a sample of 2,980 East Asian companies from 9 countries, show how firms from that region are largely family-owned (Japanese firms are an exception), as well as how corporate wealth is in the hands of a few families. Likewise, Majluf *et al* (1998) and Valadares and Leal (2000) show, either for Chile or for Brazil respectively, how representative the largest shareholders in the firms of those countries are. La Porta *et al* (1999) confirm the idea that in countries with higher antidirector rights, namely in the US, in which investors are well protected, the corporate ownership is widely held. On the contrary, they also show that countries with low shareholder protection, in which the state interferes in private business, the largest firms are more family-owned, the voting rights are separate from the cash flow rights, namely through multiple classes of stock, cross-shareholdings, and pyramidal structures, and the ownership is less diffused. More recently, Holderness (2005), based on a sample of 23 countries, refused the idea that corporate ownership in US firms is more diffused than in other countries because the largest shareholders in US firms act as managers, not as monitors, and consequently the level of investor protection cannot be the explanation for corporate ownership concentration.

The main objective of our paper is to evaluate if there is a clear relationship between shareholder rights and corporate ownership and, on the other hand, if other country-level variables such as disclosure level, corruption standards, or size of local financial industry, produce more powerful results to explain corporate ownership.

In this research we found a small number of countries like Australia, the UK and the US, where corporate ownership is widely diffused. The results obtained in this research paper point out that threshold influence the percentage of widely held firms. We found 15.9% and 39.5% of widely held firms, on average by country, for 5% and 20% threshold respectively. Prior results are dependent of the large number of firms whose ultimate owners are financial institutions at 5% threshold, but not at 20%. This occurs in common law-based countries and in countries where the quality of enforcement presents higher standards. It seems that financial institutions act as a monitor of management. In civil-law based countries, on the contrary, financial institutions act as a monitor of a larger shareholder that is simultaneously the management. Finally, the particularity of each country makes it difficult to find macro variables as determinants of ultimate owners. As a matter of fact, and contrarily to block holdings, we only found in firm's size statistical significance as determinant of the ultimate owner.

This paper proceeds as follows. Section 2 describes the variables and definitions, the methodology, and the data. Section 3 characterises the corporate ownership structure for a sample of 32 countries, namely their owners and the way the control is owned. Section 4 concludes.

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2. Data, Definitions of Variables, and Methodology

2.1. Data

This paper is based fundamentally on the information obtained from the Factset/Lionshares database, annual reports, books, and websites of firms that detail their ownership structures. For securities traded on the major US exchanges, Factset Lionshares obtained institutional ownership information via 13F filings, as well as by adding shares held by the mutual funds managed by a particular institution. This method is also used when shares traded on other stock exchanges are considered. Insider/declarable stakes data are collected through many reports, namely insider filings, registration forms, public company annual reports and interim financial statements.

Our data concerns the end of 2005, more precisely the period between December 2005 and March 2006, depending on the information supplied by firms. We selected the 20 largest firms by country, according to the results obtained from the Worldscope database (Worldscope item, WC08001), for the following countries: Australia, Austria, Belgium, Canada, Chile, Denmark, Finland, France, Germany, Greece, Hong Kong, India, Indonesia, Ireland, Italy, Japan, Malaysia, the Netherlands, New Zealand, Norway, Portugal, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, the UK, and the US.

2.2. Definitions of Variables

While voting rights determine corporate control, cash flow rights are used to evaluate corporate ownership. It is important to distinguish both concepts because they usually present different results, particularly when the shareholdings are based on pyramidal structures, a way of large shareholders to obtain control with the least amount of capital. For example, if investor A holds 5% of shares of firm X, and simultaneously 20% of shares of firm Y, which in its turn also owns 10% of firm X, then we may say that A has 7% (5%+20%*10%) of cash flow rights and controls 15% of voting rights (min(10%,20%)+5%). Moreover, differences between voting rights and cash flow rights are particularly sensitive to dual class voting shares. For example, Berkshire Hathaway Inc., the US holding company managed by Warren Buffet, has two classes of common stock, Class A and Class B. A share of Class B common stock has the rights of 1/30th of a share of Class A common stock except that a Class B share has 1/200th of the voting rights of a Class A share (rather than 1/30th of the vote). Considering that Berkshire Hathaway Inc. has issued 1,261 million and 8,407 million Class A and B shares respectively, we conclude that the 0,498 million Class A shares owned by Warren Buffet represent 32% of cash flow rights and 38% of voting rights.

Thus, whenever a firm presents dual class voting shares we use the percentage of voting shares, following the related literature. In other words, we are assuming a parallel between voting rights and number of shares, when a company has only issued a single class of shares. This is particularly relevant for Scandinavian countries, where dual class voting shares are commonly used. The Social Democratic approach of Nordic politics has played an important role in the cooperation between capital and labour interests and the maintenance of property rights has been the response to that purpose. Such view has permitted firms the use of different class voting shares and pyramidal structures in order to maintain property rights and wealth in their countries and simultaneously to discourage new outsiders, promoting corporate financing through internal resources or banking financing, placing less emphasis on capital market development (Högfeldt (2004)).

In this research, we do not consider some mechanisms used by firms to impede takeovers such as voting caps, golden shares, and voting blocks. We have collected only ultimate owners that own more than 5% of voting rights of a firm. We assume that a ultimate owner has a stake in firm if he owns 5% or 20% of voting rights, depending on the threshold we are considering. These figures are in line with recent research, for example, Holderness (2005) and La Porta *et al* (1999) who chose 5%, 10%, and 20% respectively. The ultimate owner percentage of voting rights takes into account the American Depositary Receipts (ADRs) stakes. There are few examples of shareholders in possession

of a qualified participation as a result of a simultaneous investment in common stocks and ADRs. The prior procedure is also used for ultimate owners.

It was a hard task trying to define precisely an ultimate shareholder. In fact, we had to use a large number of sources, namely sites and different type of books (history, economics, management magazines, etc). We will provide three examples. Lionshares database defines Investor AB, a Swedish company, as an investment advisor. However, this company is controlled by the Wallenberg family. The Wallenbergs are one of the most influential and wealthy families in Sweden, renowned as bankers and industrialists. Thus, we define Investor AB as a firm controlled by individuals. Another example is Temasek Holdings, a company defined as investment advisor by Lionshares database, but controlled by the government of Singapore, with the main objective of taking stakes in a variety of local companies. Finally, Corporacion Financiera Alba SA is the largest shareholder of Actividades de Construcción y Servicios, one of the largest Spanish companies in terms of development, construction and management of infrastructures. The Lionshares database defines Corporacion Financiera Alba SA as a private company, although it is controlled by the Delgado family, who has 19.7% of total voting rights. Thus we define the owner of Corporacion Financiera Alba SA as individual.[1]

We define the following ultimate owners:

- Individual - when a given person (or a group of given people) is the sole shareholder who controls a significant percentage of voting rights, we define that firm as individually controlled. For example, the Mayr Melnhof family owns 60% of voting rights of Mayr-Melnhof Karton AG, an Austrian company, that produces recycled fibre based cartonboard and manufactures folding cartons. Nevertheless, the relation between the individuals is not always easy to observe. For example, Anadolu Efes Biracilik ve Malt Sanayii A.S., a Turkish company whose activities are related to beer, malt, and soft drinks, has three shareholders that own more than 5% of voting rights. The Yazici and Ozilhan families with 29.8% and 17.3% respectively of total voting rights do not offer any doubt. But what about Anadolu Endustri Holding AS, a holding company with 7.8% of voting rights, who are the ultimate owners in this case? After a research in management magazines and sites, we found that the referred holding was controlled by the Yazici family;
- Government - when a state is the sole shareholder that controls a significant percentage of voting rights, a firm is government owned. For example, Mobistar, a Belgium wireless telecommunications firm, is owned by France Telecom, a public company. It has 50.2% of voting rights of Mobistar and no other shareholder owns more than 5% of voting rights. However, the French government owns 32.5% of voting rights of France Telecom and it is the only shareholder who also owns more than 5% of voting rights. In this case Mobistar is seen as government owned;
- Financial Institution - when a financial institution (or a group of firms related to asset management) is (are) the relevant ultimate owner(s) we can say that the ultimate owner is obviously a financial institution. We include the following kind of firms and qualified participations: investments made by bank and insurance management divisions; shares registered in brokers; hedge fund companies; investment advisors; mutual fund companies; pension funds; and, private equity firms. For example, Fosters Group, an Australian beverages firm, has the following shareholders with more than 5% of voting rights: Mondrian Investment Partners Ltd with 7.3% (Investment Advisor); Capital Research & Management Co with 7.2% (Investment Advisor); Colonial First State Investments Ltd with 6.1% of voting rights (Bank Management Division); and, Maple-Brown Abbot Ltd with 6% (Investment Advisor);

[1] Actividades de Construcción y Servicios also have more two shareholders with more than 5%: Imvernelin Patrimonio SL, a private firm according to Lionshares database, but effectively controlled by Alberto Cortina and Alberto Alcocer (9.7% of total voting rights); and an individual ownership of Florentino Rodriguez Perez (7.4% of total voting rights). Thus, we have only individuals controlling Actividades de Construccion y Servicios, and such firm, according to our definition, must be seen as individually owned, whatever the threshold considered.

- Financial Vehicle - We define a financial vehicle as a firm that was created to control another one, for example, holding companies, or very specific cases of companies, such as foundations (very common in Denmark and Italy, for example), and firms that result from cooperatives or mutual objectives (for example, Rabobank is a Dutch cooperative banking institution with offices all over the world), and trustees (for example, Leverhulme trust, a British research and educational charity). An example of a firm controlled by a financial vehicle is Carlsberg A/S, the renowed Danish brewer, whose foundation owns 79.5% of total voting rights;
- Diverse shareholders - We define a firm as with diverse shareholders when a company presents shareholders of different provenances. For example, PT Telekomunikasi Indonesia, a telecommunications company in Indonesia, is controlled by the government (51.2% of total voting rights), although Capital Research & Management Co also owns 8.8% of total voting rights;

On the contrary, when there is no ultimate owner a firm is defined as widely held – this definition is only used for ultimate owners. That is, when there is no ultimate owner with more than 5% of total voting rights. Such is, for example, the case of Banco Santander Central Hispano, the largest Spanish bank.

2.3. Methodology

We intend to observe the ownership structure of firms from countries at several stages of economic development (developed and developing countries), with different sources of law (civil and common law-based), and with distinct financial systems (banking-based or capital market-based).

We decided to choose 20 firms by country, in line with La Porta et al (1999). The main reason to choose 20 firms by country is related to the very small number of public companies. For a large number of countries, experience shows that it is illogical to think there are much more than 20 public companies. The presence of more than 20 firms in the Austrian, New Zealand, and Portuguese case means the inclusion of many more non public companies than in other countries. Even in other countries where we would expect such number to be easily exceeded, like Spain or South Korea, we must take care with possible unexpected results. Table 1, Panel A, shows that the 20 largest firms by country represent between 19.8% (Japan) and 96% (Portugal) of local market capitalisation. In average, the 20 largest firms are responsible for 70.2% of local market capitalisation.

Table 1: Ultimate Owners – Percentage of Firms by Country
This table exhibits the percentage of firms owned by type of ultimate owners, using 5% and 20% threshold. Ultimate owners with more than 5% of votes are included on the sample. A firm whose ultimate owners own less than 20% is considered widely held at 20% threshold. Ultimate owner classification is defined in section 2.2. % of country market capitalisation is the relationship between the market capitalisation of the largest twenty firms¸ obtained in Worldscope, and total market capitalisation (Datastream country indexes are used as country market capitalisation).

Panel A: Threshold 5%							
Country	**% of Country Market Cap**	**Financial Institution**	**Diverse Shareholders**	**Individuals**	**Financial Vehicle**	**Government**	**Widely Held**
Australia	68.2	35	5	0	0	5	55
Austria	84.9	0	45	10	30	5	10
Belgium	86.4	5	25	20	30	10	10
Canada	46.3	65	5	15	0	0	15
Chile	75.2	5	30	45	15	0	5
Denmark	85.9	40	15	15	30	0	0
Finland	87.4	10	30	10	10	25	15
France	59.8	10	5	10	15	20	40
Germany	61.2	5	15	25	10	10	35
Greece	84.6	10	25	30	0	25	10
Hong Kong	72.1	0	35	25	0	30	10
India	46.3	0	40	15	0	40	5
Indonésia	81.4	15	30	15	0	25	15
Ireland	90.1	50	40	0	5	0	5
Italy	67.2	0	25	15	45	5	10
Japan	19.8	15	5	0	5	25	50
Malaysia	62.9	10	70	20	0	0	0
Netherlands	77.4	40	20	10	10	5	15
New Zealand	78.0	50	35	5	0	10	0
Norway	85.7	15	40	25	0	20	0
Portugal	96.0	0	70	25	5	0	0
Singapore	68.9	5	25	20	0	35	15
South Africa	55.5	55	40	0	0	0	5
South Korea	62.7	20	45	10	0	15	10
Spain	76.6	5	20	25	30	5	15
Sweden	79.9	25	35	25	0	10	5
Switzerland	76.6	5	25	30	0	10	30
Taiwan	66.9	10	40	20	0	10	20
Thailand	78.3	0	40	15	0	40	5
Turkey	73.5	0	40	55	5	0	0
UK	64.5	40	5	0	0	0	55
USA	25.5	35	0	20	0	0	45
Mean	70.2	18.1	28.9	17.3	7.7	12.0	15.9
Median	74.3	10	30	15	0	10	10

Panel B: Threshold 20%						
Country	**Financial Institution**	**Diverse Shareholders**	**Individuals**	**Financial Vehicle**	**Government**	**Widely Held**
Australia	10	0	0	0	5	85
Austria	0	40	15	15	5	25
Belgium	0	20	20	25	10	25
Canada	0	5	15	0	0	80
Chile	5	20	45	5	0	25
Denmark	15	15	15	25	0	30
Finland 0		30	5	5	20	40
France 0		5	5	5	20	65
Germany	0	15	20	0	10	55
Greece	5	20	25	0	25	25
Hong Kong	0	35	25	0	30	10
India	0	35	10	0	35	20
Indonesia	0	30	15	0	25	30
Ireland 25		40	0	0	0	35
Italy	0	20 15		15	5	45
Japan 0		5	0	0	25	70
Malaysia	10	70	20	0	0	0
Netherlands	15	20	10	0	0	55
New Zealand	30	35	5	0	10	20
Norway	5	35	25	0	20	15
Portugal 0		70	25	0	0	5
Singapore	0	20	10	0	35	35
South Africa	10	40	0	0	0	50
South Korea	0	35	5	0	15	45
Spain	0	10	25	5	0	60
Sweden	15	35	25	0	5	20
Switzerland	0	25	20	0	10	45
Taiwan	0	30	10	0	5	55
Thailand 0		25	5	0	40	30
Turkey	0	40	55	5	0	0
UK 15		5	0	0	0	80
USA	0	0	15	0	0	85
Mean	5.0	25.9 15.	2	3.3	11.1 39.	5
Median	0	25	15	0	5	35

The way we found to evaluate whether there is any influence of firm variables or country infrastructure variables on corporate ownership is to control them. This will permit us not only to verify the similarities and differences across countries, but also to analyse which are the main determinants of corporate ownership. Thus, we use the following firm-level variables:

- Size - We expect a negative relationship between firm size and fraction of corporate control, *ceteris paribus*. Wealth constraints, in addition to risk aversion imply that a blockholder (and an ultimate owner) is less able to accomplish as a firm becomes larger (Demsetz and Lehn (1985), Prowse (1992) and Holderness (2005));
- Volatility - A firm with more volatile profit rate is more difficult to monitor and to control, and as a result the level of ownership concentration is expectably higher, in order to avoid eventual abuses by management (Demsetz and Lehn (1985), Prowse (1992), and Himmelberg *et al* (1999) document different results for such relationship);
- Market-to-Book - This variable is seen as a proxy for the growth opportunities of a firm. We expect that a firm with more growth opportunities, and also with more doubts by investors, would develop easily in a developed capital market. Kahn and Winton (1998) and Goergen and Renneboog (1998), show in theoretical and empirical terms respectively, that the ownership retention by the initial shareholders will be lower, after an IPO, on firms characterised by growth opportunities with need of external finance.

With regard to country-level variables the following are used:

- Legal Environment – We use legal country origin and anti-director rights as measures of legal environment. Country origin is divided in the two main important legal families, common and civil law origins. Anti-director rights is an index outlined by La Porta *et al* (1998). We expect a positive relationship between diffuse corporate ownership structures and common law-based countries, particularly when the agency problem concerns management-shareholder (see La Porta *et al* (1999)). In line with prior assumption, we expect that the higher the investor protection rights are, the lower the possibility of expropriating wealth is from the smallest ones by management;
- Quality of Enforcement - La Porta *et al* (1998) using some variables of law enforcement, namely corruption and rule of law, considered in this research, conclude that Scandinavian countries present the highest standards, contrarily to Fench civil law countries. In this research the level of corruption is an index produced by Transparency Internacional, named Corruption Perception Index, and Rule of Law is from La Porta *et al* (1998). Those authors also conclude, considering the three largest shareholders in the ten largest non-financial (privately owned) firms by country, that Fench civil law countries present the highest concentration of ownership. Li *et al* (2006) using an enforcement index, whose components are rule of law, regulatory quality, and absence of corruption, show that there is positive impact of such variable on ownership held by institutional blockholders;
- Corporate Disclosure – More diffused ownership structures in countries where accounting and financial disclosure present higher standards (see La Porta *et al* (1998)) is expected. In fact, in that case it is easier to monitor the management (and large shareholders decisions) and consequently to avoid the expropriation of wealth from minority shareholders. However, that relationship must be taken with caution, because, for example, Guedhami and Pittman (2006), for a group of privatised firms from 31 countries, find weak evidence between ownership concentration and disclosure standards;
- Religion - Local beliefs produce impacts on different areas of economy. Weber (1904) in his notable book, "The Protestant Ethic and the Spirit of Capitalism", found that Protestantism, in particular in Calvinism, as a means of explaining capitalism[2] and it will be used to test if there is, as we expect, a positive relationship between non Catholic religion and the existence of ultimate owners;
- Economic, Stock Market, Banking, and Financial Institutional Environment - Financial decisions taken by firms depend on the level of capital market development. In some financial markets, like the US and the UK, which are clearly market-based, the issue of equity is a natural source of finance for firms.[3] The opportunities in a developed capital market induce firms to issue equity; in this case, we expect a lower ownership concentration ratio for developed capital markets. In fact, as Dyck and Zingales (2002) conclude, in countries with less developed capital markets the private benefits of control are higher and the ownership is more concentrated. We use the liquidity ratio as a proxy for capital market development. Liquidity ratio is defined as volume traded at a local stock exchange divided by the gross domestic product (GDP). Private credit is also used to evaluate if a banking system influence corporate ownership. Financial literature found a positive relationship between

[2] In the Renaissance period, contrarily to Catholic religion which defended a fairly luxurious way of life, emerged in the 16th century a group of reformists, namely Martin Luther and John Calvin, of the Catholic church, who started a religious movement, later designated as the Protestant Reformation. Protestants defended that hard work led to prosperity and a life without luxury. From their asceticism resulted an accumulation of capital, which inspired the beginning of capitalism. But the impact of religion on economy, and more particularly on firms' corporate control, should be extended to the Franciscans, a Roman Catholic Order created in the 13th century. In fact, that Order played an important role on the economy since the 15th century, particularly through the implementation of "Montes Pietatis", financial institutions with mutual purposes. These institutions, in order to protect persons from usurers, loaned money with exclusively charitable and solidarity ends.

[3] Rajan and Zingales (1998) show the importance of a well-developed financial market for industries with more need of external finance. A firm whose growth depends on external capital will grow more rapidly in a developed stock market. According to Demirguk and Levine (1999), there is a positive relationship between market-based financial systems, and strong shareholder rights protection, good accounting regulations, and low levels of corruption.

the development of banking and capital market, and thus a positive relationship between private credit and diffused ownership structures is expected. Demirgüç-Kunt and Levine (1999) show that in higher income countries, the overall financial system becomes larger, although they tend to be more market-based. Domestic credit provided by banking sector % of GDP, from World Bank, is the measure of private credit. The level of economic development measured by GDP per capita will be used to evaluate if different economic conditions influence the percentage of widely held firms. Finally, because there is a positive relationship between the size of mutual fund industry, a proxy for financial institutional development, and strong rules and laws (see Khorana *et al* (2005)), we test if the same occurs between diffused ownership and the level of development of financial institutions.

3. Results

First, we identify the ultimate owners of the 20 largest firms by country. More diffused ownership structures in developed capital markets, where shareholders are well protected, with higher transparency standards, and disclosure levels is expected. In this research, it will be important to evaluate if the stakes of ultimate owners are explained by macro variables, as legal environment, quality of enforcement, corporate disclosure, historical foundations, and the economic environment, or on the other hand, because the largest firms around the world are being considered, restrictions of wealth are more important to explain either block holdings or ultimate owners.

Table 1, Panels A and B, shows the percentage of firms controlled by category of ultimate owner, considering 5% and 20% threshold. Financial institutions control a significant percentage of largest firms of Canada, Ireland, New Zealand and South Africa for a 5% threshold. However, when threshold is 20% the percentage of firms controlled by financial institutions is highly reduced (from 18.1% to 5%, on average by country). For example, not one Canadian firm is controlled by a financial institution, when 20% threshold is considered. However, 65% of Canadian firms of our sample are controlled by a financial institution when threshold is 5%. These results are in line with the idea that financial institutions under financial and risk constraints prefer to act as a monitor of management. Malaysia and Portugal present a significant percentage of firms (70%) whose owners have a different origin. Contrarily to financial institutions, when we analyse firms controlled by diverse shareholders there is no change considering 5% or 20% threshold. In fact, Panels A and B, show that diverse shareholders own, on average, 28.9% (25.9%) of sample for 5% (20%) threshold. In this case, we suspect that there are many firms where a minoritary ultimate owner with a stake higher than 5% controls a large shareholder that is simultaneously the management. Probably, this occurs in countries where ultimate owners are less protected and the benefits obtained of monitoring a large ultimate owner by a minority one are higher. Panels A and B, of Table 1, also show that threshold does not produce significant changes on the percentage of firms controlled by individuals (from 17.3% to 15.2%, on average by country). In this case it is plausible to say that management and controller are the same entity, since the percentage of voting rights often exceeds 20%. Chile and Turkey are the most represented countries in terms of control by individuals. On the opposite extreme are Australia, Ireland, Japan, South Africa, and the UK. Financial vehicles, contrarily to individuals, are influenced by the threshold chosen. The percentage of firms owned by financial vehicles varies from 7.7% to 3.3%, for 5% and 20% threshold respectively. However, while in some countries threshold does not seem to not produce different results (e.g., Belgium and Denmark), there are others where the influence of financial vehicles changes with threshold (e.g., Austria, Italy, and Spain). Those countries had a period of mutualisation as a common characteristic. That is, a period where the firm's main objective was not to obtain profits, but to help a cause. It is possible to observe that trend in Belgium, through Cera Holding, a cooperative Group, with important stakes on KBC, AGFA, and Almancora, some of the largest Belgian firms, in Denmark where local foundations control large Danish firms (for example, Carlsberg, Danske Bank, and H. Lundbeck), and in Spain, where the major Catalan bank, La Caixa, controls Telefonica, Telefonica Mobiles, Banco Sabadel, and Repsol. The history and culture seems to

influence the firm's control in some countries. On the other hand, firms controlled by the state are not influenced by threshold. In fact, 11.1% (12.0%) of firms from the sample are owned by states for 20% (5%) threshold. Table 1 shows how Asian governments influence their economy. India, Singapore, and Thailand are its main exponents. For example, Temasek Holding, an investor advisor owned by the Singaporean government, controls some local large firms (e.g., DBS Group, Keppel Corp, Capitaland, Singapore Airlines, Chartered Semiconductor, Neptune Orient Lines, and Starhub). Table 1 also shows that a widely held firm is dependent from threshold. In fact, the percentage of firms without controller varies from 15.9% (5% threshold) to 39.5% (20% threshold). However, it is difficult to conclude that a shareholder with 5% of voting rights controls a firm. In fact, the difference from 5% to 20% threshold must be attributed to the change observed on firms supposedly controlled by financial institutions, but that in reality act as a monitor of management. In spite of large ownership concentration around the world, there are many large firms where the agency cost is focused on the relationship between manager and a minority shareholder. This evidence is not observed in Malaysia, Portugal, and Turkey. In these countries the conflict of interest is based on the relationship between large and minority shareholders.

Summing up, there are some signs that ultimate owners are a puzzling issue because is dependent of country specific infrastructure, political foundations, and economic characteristics. However, because such countries each had their own development, many times the singularity of each country may not be observed through macro variables, as corruption index or religion. For example, some large firms from Japan and Thailand are controlled by the government, although they have different legal origins, shareholders are differently protected, and the level of corruption is significantly different. While in Japan the state decided to maintain the control of some firms, as in Japan Tobacco, Resona Holdings, Nippon Telegraph & Telephone, NTT Domo, and Nissan (controlled by Renault, a firm owned by the French government), in Thailand the local government has been helped by the Singaporean government in order to maintain the control of local firms in security hands (for example, ADV Info Service and Shin Corp). Thus, it is a difficult task to find the main determinants of corporate ownership once its result is the consequence of singular policies. In this research, such is more difficult due to our small sample of 32 countries.

Table 2, Panel A, reports summary statistics of country-level variables. The sample represents different country infrastructures because, in general, variables show a wide variation. For example, there are (i) 15 countries, where shareholders are protected (anti-director rights higher than 4), (ii) 12 common law-based countries, and (iii) 11 Catholic countries. This result explains why the sample has many capital market and banking-based countries (see, for example, Demirguk and Levine (1999)). Corruption level and rule of law, on the other hand, do not exhibit significant changes as other variables. Only 4 countries display a lower GDP per capita (< 10.000 dollars), as well as 3 with lower score for rule of law (< 3), which confirms that most of countries are developed economies. In fact, emerging capital markets are only represented by Chile, India, Indonesia, Malaysia, Singapore, South Africa, South Korea, Taiwan, Thailand and Turkey. Concerning firm-level variables (Panel B) it must be stated that G-7 countries present the largest firms around the world. The median market capitalisation of the 20 largest firms of those countries exceeds 15 billion dollars. Firms from Chile, Indonesia, Ireland, New Zealand, Portugal, Thailand, and Turkey, in their turn, present a median market capitalisation inferior to 3 billion dollars, reflecting once more how heterogeneous the sample is. In relation to market-to-book it must be focused that the result obtained for the US, significantly higher than in most countries, illustrates the importance of the US capital market for firms with growth opportunities. Indonesia, South Korea, and Turkey, on the other hand, as emerging countries exhibit the highest volatility.

Table 2: Summary of Variables

Anti-director rights is from La Porta et al (1998) and ranges from 0 to 6. Corruption perception index is from Transparency International (2005) and ranges from 0 to 10. Rule of law is from La Porta et al (1998) and varies from 0 to 10, with lower values for less tradition for law and order. Disclosure level is from Bhattacharya et al (2003), with higher value indicating more disclosure. The original source is the Center for International Financial Analysis and Research (CIFAR). Liquidity ratio is from World Development Indicators and is defined as volume traded at a local stock exchange divided by the gross domestic product (GDP) - average from 1999 to 2003. Size of mutual fund industry is from Investment Company Institute (ICI) and relates the total net assets of mutual funds with GDP in 2005. Private credit is from World Bank and is defined by domestic credit provided by banking sector % of GDP 2004. GDP per capita in 2005 is from International Monetary Fund (IMF). Law is a dummie variable (1=common; 0=civil). Religion is a dummie variable (1=Catholic; 0=other). The median market capitalisation of the 20 largest firms by country, million dollar denominated, is from Worldscope (WS Item, WC07211). The median market-to-book of the 20 largest firms by country is also Worldscope. Market-to-book is defined as total assets (Worldscope Item, WC 02999) minus book equity - defined as total assets minus total liabilities (WC 03351) and preferred stock (WC 03451) plus deferred taxes (WC 03263) and convertible debt (WC 18282) - plus market capitalisation (WC 08001), local currency denominated, divided by total assets. The median annualised volatility of the 20 largest firms by country is calculated using Datastream data, dollar denominated, considering weekly returns during 2000-2005.

Panel A: Country-Level Variables

Country	Anti-Director Rights	Corruption Perc. Index	Ruleof Law	Disclosure Level	Liquidity Ratio	Size of Mutual Fund Industry	Private Credit	GDP per Cap.	Law	Religion
Australia	4	8.8	10.0	80	0.97	1.10	1.00	30.897	Common	Other
Austria	2	8.7	10.0	62	0.16	0.37	1.23	33.432	Civil	Catholic
Belgium	0	7.4	10.0	68	0.71	0.33	1.12	31.244	Civil	Catholic
Canada	5	8.4	10.0	75	1.02	0.50	0.97	34.273	Common	Catholic
Chile	5	7.3	7.02	78	0.83	0.15	0.70	11.937	Civil	Catholic
Denmark	2	9.5	10.0	75	0.58	0.31	1.66	34.740	Civil	Other
Finland	3	9.6	10.0	83	1.78	0.24	0.70	31.208	Civil	Other
France	3	7.5	8.98	78	0.88	0.67	1.07	29.187	Civil	Catholic
Germany	1	8.2	9.23	67	0.56	0.71	1.43	30.579	Civil	Other
Greece	2	4.3	6.18	61	0.80	0.16	1.05	22.392	Civil	Other
Hong Kong	5	8.3	8.22	73	3.39	2.83	1.49	33.479	Common	Other
India	5	2.9	4.17	61	0.30	0.06	0.60	3.320	Common	Other
Indonesia	2	2.2	3.98	NA	0.23	NA	0.71	4.459	Civil	Other
Ireland	4	7.4	7.80	81	0.67	3.01	1.18	40.610	Common	Catholic
Italy	1	5.0	8.33	66	0.53	0.27	1.05	28.534	Civil	Catholic
Japan	4	7.3	8.98	71	0.68	0.10	1.55	30.615	Civil	Other
Malaysia	4	5.1	6.78	79	1.41	NA	1.34	11.201	Common	Other
Netherlands	2	8.6	10.0	74	1.36	0.16	1.67	30.862	Civil	Catholic
New Zealand	4	9.6	10.0	NA	0.40	0.10	1.21	24.797	Common	Other
Norway	4	8.9	10.0	75	0.37	0.16	0.11	42.364	Civil	Other
Portugal	3	6.5	8.68	NA	0.47	0.17	1.51	19.335	Civil	Catholic
Singapore	4	9.4	8.57	79	1.59	NA	0.80	28.368	Common	Other
South Africa	5	4.5	4.42	79	1.54	0.31	0.85	12.161	Common	Other
South Korea	2	5.0	5.35	68	0.48	0.29	1.01	20.590	Civil	Other
Spain	4	7.0	7.80	72	0.76	0.30	1.39	26.320	Civil	Catholic
Sweden	3	9.2	10.0	83	1.14	0.34	1.13	29.926	Civil	Other
Switzerland	2	9.1	10.0	80	2.52	0.33	1.75	32.571	Civil	Catholic
Taiwan	3	5.9	8.52	58	1.02	0.19	1.67	27.721	Civil	Other
Thailand	2	3.8	6.25	66	0.38	NA	1.05	8.368	Common	Other
Turkey	2	3.5	5.18	58	0.33	0.07	0.60	7.950	Civil	Other
UK	5	8.6	8.57	85	1.59	0.26	1.58	30.436	Common	Other
USA	5	7.6	10.0	76	1.42	0.76	2.71	41.399	Common	Other
Mean	3.2	7.0	8.22	72.8	0.97	0.51	1.18	25.790		
Median	3.0	7.5	8.63	75	0.78	0.30	1.13	29.557		

Panel B: Firm-Level Variables			
Country	**Market Capitalisation (median)**	**Market-to-Book (median)**	**Volatility (median)**
Australia	15.219	1.41	0.22
Austria	4.077	1.23	0.27
Belgium	6.896	1.34	0.25
Canada	28.917	1.35	0.24
Chile	2.763	1.24	0.27
Denmark	4.014	1.51	0.29
Finland	4.067	1.50	0.31
France	47.826	1.19	0.29
Germany	32.799	1.07	0.34
Greece	4.483	1.38	0.30
Hong Kong	13.974	1.14	0.30
India	10.914	1.72	0.41
Indonesia	2.242	1.52	0.49
Ireland	2.979	1.57	0.27
Italy	17.247	1.13	0.28
Japan	49.882	1.11	0.34
Malaysia	4.206	1.22	0.20
Netherlands	14.195	1.39	0.34
New Zealand	1.084	1.49	0.26
Norway	3.125	1.51	0.35
Portugal	2.360	1.18	0.26
Singapore	4.108	1.15	0.28
South Africa	10.106	1.56	0.35
South Korea	12.919	1.20	0.46
Spain	16.121	1.31	0.23
Sweden	13.464	1.36	0.30
Switzerland	16.367	1.74	0.32
Taiwan	9.321	1.41	0.35
Thailand	2.814	1.24	0.36
Turkey	2.919	1.23	0.56
UK	71.490	1.62	0.26
USA	155.476	1.93	0.27
Mean	18.387	1.37	0.31
Median	9.714	1.36	0.29

In Table 3, Panels A and B, the percentage on mean of firms owned by type of ultimate owner are exhibited, considering 5% and 20% as threshold. Means are grouped following the criteria alluded to in section 3. In general, when 5% threshold is used there are more significant differences between groups of countries. In fact, when the stakes of ultimate owners are being analysed, results are not independent of threshold. A possible reason for such differences concerns the role of financial institutions in the control of firms. While in some rich countries with common legal environment, high quality of enforcement, high disclosure level and developed capital markets, like Australia, Canada, Ireland, the UK, and the US, amongst others, financial institutions are the only ultimate owner having a stake in firms that, generally varying from 5% to10%, (see Table 3, Panels A and B, concerning differences on mean between common and civil law-based countries, high *versus* low anti-director rights, high *versus* low corruption perception index, high *versus* low disclosure level, and it is confirmed that means are different for 5% threshold, but not for 20%), in some less developed capital markets whose enforcement presents low quality, financial institutions are not the only ultimate owner and usually their stakes also vary from 5% to 10% (see Panels A and B, concerning diverse shareholders and differences on mean between high *versus* low corruption perception index, and it is confirmed either for 5% or for 20% threshold that in countries with high standards of corruption there are more firms with diverse ultimate owners). This occurs usually, for example, in Greece, India, Indonesia, and Taiwan, amongst others. For example, in Indonesia Capital Research & Management

and local government have important stakes in the same firms (PT Telekomunikasi Indonesia, PT Perusahaan Gas Negara and PT Bank Mandiri). As in prior results, it seems that while in less developed capital markets financial institutions act as a monitor of management, in undeveloped capital markets financial institutions act as monitor of majority shareholder that is simultaneously the management. An important result of this research concerns the non definitive relationship between widely-held firms and law. Common law-based countries present more diffused corporate control structures but without statistical significance (see Table 3, Panels A and B). This result contrasts with La Porta *et al* (1999) since their results indicate a positive relationship between anti-director standards (highly related to law) and diffused ownership structures. In fact, the agency problem between management and shareholders would be avoided in countries where the shareholders were well-protected and it would reflect itself in a more diffused ownership structure. But not infrequently management and the majority shareholders are the same entity and the agency problem arises in the relationship between larger and minority shareholders. Thus, the question that we should ask is: Are agency theory, law and finance reasons enough to explain the corporate control? It seems not. Or on the other hand, do we have to consider other perspectives like the privatisation policies taken by the states, the way of thinking of governments, more liberal or more social democratic, or the quality of enforcement (analysing either corruption standards or rule of law). Who would like to invest in a country where public institutions do not perform well their role? Or in other words: What dominates what? Is political economy more important than law and finance or are both equally important? Probably both are important and it is difficult to conclude which factor is more relevant. In common law-based countries firms are more controlled by financial institutions firms than in civil ones, as we noted. Capital markets are more developed in these countries, issuers provide more information, financial industry is highly developed. However, it must be enhanced that this result can not be extensible to all common law-based countries, as we observed. For example, in Hong Kong, India and Thailand we do not witness any firm controlled by a financial institution. On the contrary, in those countries, there are many firms controlled by the government. However, they are common-law based. Thus, there are some reasons to believe in the importance of political economy on corporate control. Table 3, Panels A and B, shows that individuals exercise higher control over firms in civil-law based countries (always significant at 1% level of statistical significance). We identify the following plausible reasons for such result: First, shareholders are less protected in civil-law based countries and consequently it is necessary that a larger shareholder controls the management; Second, individuals are often the founders of the firms and do not like to divide the lock of control in order to share the private benefits with minority shareholders; Third, in civil-law based countries apparently there are some signs that firms are smaller and consequently they are more easily controlled by individuals. Moreover, there are other reasons for a family business to grow fast in less developed capital markets with lower disclosure levels and lower quality of enforcement, although differences on mean for such criteria have not been found: Following a long period in which the state assumed a relevant role, many firms were privatised and the governments for a number of reasons prefer to sell firms to locals. Moreover, some privatised firms were located in sectors with many restrictions to develop an activity, if not faced with monopolies. Thus, it is understandable how such families create wealth so fast. Chile and Turkey, for example, belong to the group of countries where such process occurred. In Chile the wave of privatisations from 1974 to 1979 and from 1984 to 1989 created the Angelini, Luksic, and Matte groups. In Turkey, the privatisation movement started in the mid 80's, with obstacles, many of them related to work/labour force, delaying its end to recent years. During that period some Turkish families and individuals increased their wealth buying firms owned by the state, creating conglomerates, namely the Dogan Aydin and Koc and Sabancy families. In fact, corporate ownership is a puzzle issue, where law and finance and political economy both assume importance to explain it. There are many common-law based countries whose economy has recently adhered to market economy, and even though some of them prefer to maintain the lock of control of firms in the hands of the government, particularly in sectors related to the offer of national interest goods, such as water, telecommunications, and railways, amongst others. This is the case of Hong Kong where MTR Corporation (railways), Boc

Hong Kong (bank), Cnooc Ltd (oil and gas), China Mobile (wireless telecommunications), China Unicom (major telecommunications), and China Netcom Group (major telecommunications) are directly owned by the government of the People's Republic of China. This example helps to understand why some countries with the same legal origin, present different patterns in terms of ultimate owners. For example, in Hong Kong, India, Singapore and Thailand there are many firms controlled by the government, contrarily to Canada, Ireland, Malaysia, South Africa, the UK and the US. In Table 5, Panels A and B, also shows that there are differences on mean in some criteria when financial vehicles are being analysed. In common law and Catholic-based countries (although this criteria accounts for only 5% threshold) financial vehicles play a more relevant role in the control of firms. This is mainly a consequence of different political and economic models produced by countries along the years, particularly in some continental European countries, namely in Austria, Belgium, Denmark, Italy, and Spain. The historical presence of institutions with mutual and cooperative interests is a plausible explanation for such result and explains why civil-law based countries present higher means when we analyse firms controlled by this type of shareholders. In Italy, since the 15th century there have been many financial institutions with mutual origins that were inspired by Franciscan principles, the old *"Montes Pietatis"*. These institutions loaned money in cash with the guarantee of a pledge, without interest, and with exclusively charitable and solidarity ends, in order to protect individuals from usurers. From this process resulted many *"fondaziones"* some of them subsequent to the 18th century, which are nowadays not only the main important shareholders of some Italian banks, but additionally of some foreign banks. For example, the largest ultimate shareholder from Unicredito, the major Italian bank, that controls the German bank Bayerische Hypo und Vereinsbank AG and the Austrian bank Bank Austria Creditanstalt, is Fondazione Cassa Risparmio Verona Vicenza Belluno Anco. Crédit Agricole, a French institution with a mutual mission, and Fondazione Cariplo - Cassa di Risparmio delle Provincie are the largest shareholders of Banca Intesa, the second largest Italian bank. The financial Italian movement was followed in Spain. In fact, the process ended on *"cajas de ahorros",* although some of them are currently private companies. The most relevant example of the importance of these financial institutions is La Caixa, a Catalan bank, the major ultimate shareholder of Banco Sabadell, Repsol, and Telefonica. In Austria there are also many institutions with mutual aims. For example, Raiffeisen, one of the largest banking groups in the country is a cooperative bank owned by 9 regional banks, and Wiener Städtische, the largest Austrian Insurance company, and one of the most important in Central Europe was managed until 1992 with a legal form of a mutual insurance company. Also in Belgium, Almancora, an investment management company, has Cera Holding as its main important ultimate owner, a cooperative financial group. Another example is Agfa - Gevaert NV, a Belgium electronic company controlled by KBC Group, which in its turn is controlled by Almancora (owned by Cera Holding), Boerenbond Group (a farmers association whose main objective is to protect farmers against unfair commercial practices) and Cera Holding. Denmark, on the other hand, is the land of foundations. For example, Carlsberg A/S, the famous brewer, is controlled by Carlsberg foundation and H Lundbeck A/S and Novo Nordisk A/S, the Danish Pharmaceuticals, are governed, respectively by Lundbeck Fonden and Novo Nordisk Fonden.

Table 3: Univariate Analysis by Category of Ultimate Owner
The table compares means of firms (in percentage) by category of ultimate owners and t-statistics based on the 20% percent and the 5% threshold, for a sample of the largest firms by country. All ultimate owners representing more than 5% of voting rights are included in the sample. However, if the analysis imposes a 20% threshold (Panel B), and the sum of voting rights is lower than 20%, a firm is widely held. Means for countries are grouped according to the following criteria: Legal environment; Anti-director rights; Corruption perception index; Rule of law; Disclosure level; Religion; Liquidity ratio; Private credit; GDP per capita; Size of mutual fund industry; Market capitalisation by firm (country median); Market-to-book (country median); Volatility by firm (country median). *, **, and ***, indicate statistical significance at 10%, 5% and 1%. N is the number of countries.

Panel A: 5% threshold							
	N	**Financial Institution**	**Diverse Shareholders**	**Individuals**	**Financial Vehicle**	**Government**	**Widely Held**
Means							
Common	12	28.8	28.3	11.3	0.4	13.3	17.9
Civil	20	11.8	29.3	21.0	12.0	11.3	14.8
t – statistic	(2.27)**	(-0.13)	(-2.45)**	(-3.74)***	(0.38)	(0.46)	
High Anti-director rights	15	25.7	26.3	14.3	3.7	11.3	18.7
Low Anti-director rights	17	11.5	31.2	20.0	11.2	12.6	13.5
t – statistic	(2.15)**	(-0.78)	(-1.28)	(-1.86)	(-0.28)	(0.83)	
High Corruption Perc. Index	16	23.8	21.3	15.3	6.6	11.6	21.6
Low Corruption Perc. Index	16	12.5	36.6	19.4	8.8	12.5	10.3
t – statistic	(1.72)*	(-2.77)***	(-0.92)	(-0.50)	(-0.21)	(1.99)*	
High Rule of Law	16	22.2	23.4	15.3	9.1	9.7	20.3
Low Rule of Law	16	14.1	34.4	19.4	6.3	14.4	11.6
t – statistic		(1.21)	(-1.87)*	(-0.92)	(0.65)	(-1.05)	(1.51)
High Disclosure Level	15	27.0	24.7	15.7	5.0	8.3	19.3
Low Disclosure Level	14	7.9	30.0	19.6	11.8	16.1	14.6
t – statistic	(3.19)***	(-0.89)	(-0.83)	(-1.45)	(-1.66)	(0.75)	
Catholic	11	16.8	28.2	18.6	16.8	5.5	14.1
Others	21	18.8	29.3	16.7	2.9	15.5	16.9
t – statistic	(-0.25)	(-0.17)	(0.42)	(2.95)***	(-2.83)***	(-0.52)	
High Liquidity Ratio	16	23.7	23.7	15.3	10	8	19.3
Low Liquidity Ratio	16	15.0	31.2	19.6	7.3	12.7	14.2
t – statistic	(1.18)	(-1.21)	(-0.81)	(0.56)	(-1.11)	(0.76)	
High Size of Mutual Fund Ind.	14	19.4	22.1	15.7	10.7	7.5	20.0
Low Size of Mutual Fund Ind.	14	6.8	32.1	18.9	6.8	12.9	13.9
t – statistic	(2.51)**	(-1.66)	(-0.63)	-0.82	(-1.31)	(0.92)	
High Private Credit	16	20.6	29.7	15.9	7.8	7.5	18.4
Low Private Credit	16	15.6	28.1	18.8	7.5	16.6	13.4
t – statistic	(0.73)	(0.25)	(-0.63)	-0.07	(-2.14)**	(0.84)	
Large GDP per Capita	16	24.1	21.6	14.4	8.1	9.7	22.2
Small GDP per Capita	16	12.2	36.3	20.3	7.2	14.4	9.7
t – statistic	(1.82)*	(-2.63)**	(-1.36)	-0.21	(-1.05)	(2.25)**	
High Market Capitalisation	16	22.2	20.3	14.1	7.2	11.3	25.0
Low Market Capitalisation	16	14.1	37.5	20.6	8.1	12.8	6.9
t – statistic	(1.21)	(-3.22)***	(-1.51)	(-0.21)	(-0.34)	(3.61)***	
High Market-to-Book	16	27.2	26.6	13.8	3.4	11.6	17.5
Low Market-to-Book	16	9.1	31.3	20.9	11.9	12.5	14.4
t – statistic	(3.01)***	(-0.77)	(-1.67)	(-2.06)**	(-0.21)	(0.52)	
High Volatility	16	14.1	31.6	19.4	2.5	18.1	14.4
Low Volatility	16	22.2	26.3	15.3	12.8	5.9	17.5
t – statistic	(-1.21)	(0.87)	(0.92)	(-2.61)**	(3.08)***	(-0.52)	

Panel B: 20% threshold							
	N	**Financial Institution**	**Diverse Shareholders**	**Individuals**	**Financial Vehicle**	**Government**	**Widely Held**
Means							
Common	12	8.3	25.8	8.8	0.0	12.9	44.2
Civil	20	3.0	26.0	19.0	5.3	10.0	36.8
t – statistic		(1.63)	(-0.02)	(-2.66)**	(-2.87)***	(0.55)	(0.74)
High Anti-director rights	15	7.3	23.7	13.0	0.7	10.7	44.7
Low Anti-director rights	17	2.9	27.9	17.1	5.6	11.5	35.0
t – statistic		(1.53)	(-0.69)	(-0.90)	(-2.25)**	(-0.18)	(1.09)
High Corruption Perc. Index	16	6.6	20.0	13.1	3.1	10.6	46.6
Low Corruption Perc. Index	16	3.4	31.9	17.2	3.4	11.6	32.5
t – statistic		(1.10)	(-2.07)**	(-0.91)	(-0.13)	(-0.21)	(1.68)
High Rule of Law	16	5.6	22.2	13.8	4.7	8.8	45
Low Rule of Law	16	4.4	29.7	16.6	1.9	13.4	34.1
t – statistic		(0.43)	(-1.25)	(-0.62)	(1.16)	(-1.06)	(1.28)
High Disclosure Level	15	7.3	23.0	13.3	2.7	7.7	46.0
Low Disclosure Level	14	1.4	25.0	17.1	4.6	14.6	37.1
t – statistic		(2.58)**	(-0.34)	(-0.78)	(-0.73)	(-1.50)	(0.99)
Catholic	11	4.1	25.0	17.7	6.4	4.5	42.3
Others	21	5.5	26.4	13.8	1.7	14.5	38.1
t – statistic		(-0.45)	(-0.21)	(0.86)	(1.67)	(-2.81)***	(0.48)
High Liquidity Ratio	16	5.3	22.5	14.4	0.9	9.7	47.2
Low Liquidity Ratio	16	4.7	29.4	15.9	5.6	12.5	31.9
t – statistic		(0.22)	(-1.15)	(-0.35)	(-2.01)**	(-0.63)	(1.84)*
High Size of Mutual Fund Ind.	14	5.4	20.4	14.3	5.4	6.8	47.9
Low Size of Mutual Fund Ind.	14	5.4	28.6	16.8	2.1	11.4	35.7
t – statistic		(0.00)	(-1.38)	(-0.49)	(1.18)	(-1.17)	(1.32)
High Private Credit	16	7.8	28.1	14.4	2.8	6.3	40.6
Low Private Credit	16	2.2	23.8	15.9	3.8	15.9	38.4
t – statistic		(2.08)**	(0.72)	(-0.35)	(-0.38)	(-2.35)***	(0.25)
Large GDP per Capita	16	6.3	20.3	13.1	4.4	8.8	47.2
Small GDP per Capita	16	3.8	31.6	17.2	2.2	13.4	31.9
t – statistic		(0.88)	(-1.95)*	(-0.91)	(0.89)	(-1.06)	(1.84)*
High Market Capitalisation	16	4.1	18.1	11.9	1.6	10.0	54.4
Low Market Capitalisation	16	5.9	33.8	18.4	5.0	12.2	24.7
t – statistic		(-0.65)	(-2.88)**	(-1.50)	(-1.43)	(-0.49)	(4.31)***
High Market-to-Book	16	9.1	24.7	11.3	1.9	10.0	43.1
Low Market-to-Book	16	0.9	27.2	19.1	4.7	12.2	35.9
t – statistic		(3.28)***	(-0.41)	(-1.82)*	(-1.16)	(-0.49)	(0.83)
High Volatility	16	3.1	28.4	15.9	0.6	16.6	35.3
Low Volatility	16	6.9	23.4	14.4	5.9	5.6	43.8
t – statistic		(-1.34)	(0.82)	(0.35)	(-2.32)**	(2.72)***	(-0.98)

Summing up, although it seems that ultimate owners have been influenced by the way capitalism was created in each country. That is, many countries were influenced by mutual environment, the role of the state has had different interpretations and is highly observed in many Asian countries, in some less developed countries like Chile and Turkey individuals play an important role in the economy, in other countries like Singapore and South Africa institutions were created to deal with social insurance that have an important role in the local capital markets, in some common-law based countries (Australia, Canada, Ireland, New Zealand, the UK and the US) financial institutions are comparatively an important type of blockholder and ultimate owner, and in Nordic countries dual class shares is typical and was the way local governments, social democratic oriented, chose to maintain the control of firms. However, all the countries have common restrictions of wealth, and at least it would be the most popular determinant of corporate ownership. The remaining determinants, on the contrary, are country specific.

Table 4 present a multivariate analysis, from which we intended to evaluate the determinants of ultimate owners, considering the percentage of widely held firms by country as the dependent variable, for a 20% of threshold. The results confirm that when we are analysing ultimate owners only market capitalisation matters. Wealth restriction is the explanation for the influence of market capitalisation on the percentage of widely held firms by country. On the contrary, we do not identify any country

variable that influences the percentage of widely held firms because, as we noted, each capital market has had its own history, that is to say, a specific process of development, impeding the establishment of international patterns.

Table 4: Multivariate Analysis of Cross-Country Variations on Widely Held Firms
The table reports the results of OLS regressions for a sample of 32 countries, considering 20% threshold. The dependent variable is mean percentage of widely held firms by country. Independent variables are defined in Table 3. Heteroskedasticity-consistent standard errors are reported in parentheses.

Law	4.432 (0.54)	4.014 (0.51)	3.778 (0.50)	4.434 (0.59)			
Corruption Perc. Index	0.152 (0.06)	0.855 (0.30)	1.262 (0.85)			1.398 (1.02)	
Rule of Law	-0.442 (-0.12)	0.522 (0.16)		1.412 (0.83)			1.491 (0.98)
Religion	3.572 (0.64)	3.807 (0.69)	4.017 (0.78)	3.578 (0.67)			
GDP per Capita	6.471 (0.78)				5.931 (1.21)		
Market Capitalisation	14.549 (7.70) ***	15.229 (8.58) ***	15.323 (9.83) ***	15.118 (9.26) ***	14.684 (8.49) ***	15.441 (9.76) ***	15.250 (9.04) ***
Market-to-Book	14.960 (0.93)	13.595 (0.83)	13.674 (0.85)	13.537 (0.84)	16.657 (1.46)	14.801 (1.21)	15.298 (1.26)
Adj. R^2 N	0.54 32	0.55 32	0.57 32	0.56 32	0.59 32	0.59 32	0.59 32

4. Conclusion

The main objective of this research paper is to evaluate how corporate control is performed in the largest firms of 32 countries with different country and firm-level characteristics. For that purpose we consider the concept of ultimate owner.

As expected there is a small number of countries like Australia, the UK, and the US, where corporate ownership is widely diffused. This research paper shows that threshold influences the percentage of widely held firms. In fact, there are 15.9% of widely held firms, on mean by country, when 5% threshold is chosen, that compares with 39.5% for 20% threshold. This result derives from the large number of firms whose ultimate owners are financial institutions at 5% threshold, but not at 20%. This relationship is very popular in common-law based countries, as well as in countries where the quality of enforcement presents higher standards. Under those infrastructures, financial institutions seem to act as a monitor of management. On the contrary, when we are in the presence of countries where shareholders are not well protected, typically in civil-law based countries, financial institutions act as a monitor of a larger shareholder, that is simultaneously the management. It seems that a financial institution has benefits of monitoring management in a common-law based country and of monitoring a larger shareholder in a civil one.

The particularity of each country makes it difficult to find macro variables for determinants of ultimate owners. In fact, in many countries of continental Europe, namely in Austria, Belgium, Denmark, Italy and Spain, with different country infrastructures, where there is a significant number of firms whose ultimate owners have mutual origin; in many Asian countries, independently of enforcement standards, there is a significant number of firms controlled by the state (Hong Kong, India, Indonesia, Singapore and Thailand); in Ireland and New Zealand there is a significant number of firms controlled by financial institutions; in Turkey and Chile individuals are the most observed ultimate owner; in Australia, Canada, France, Germany, Japan, the UK and the US there are many widely held firms and their infrastructures are also different. In this last case, the firm's size and wealth

restriction are the explanations for such result. As a matter of fact, and contrarily to block holdings, we only found a degree of statistical significance in firm's size as a determinant of ultimate owner. This was expected because a block holding stake is generally higher than one owned by an ultimate owner.

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